TRENTON NAVAL AIR WARFARE CENTER
TRENTON, NEW JERSEY

Engineering Field Division/Activity:	NORTHDIV
Major Claimant:	COMNAVAIRSYSCOM
Size:	54 Acres
Funding to Date:	$2,813,000
Estimated Funding to Complete:	$11,816,000
Base Mission:	Develops and tests aircraft engines
Contaminants:	Heavy metals (cadium, chromium, lead), POLs, solvents, volatile organic compounds

Number of Sites:		**Relative Risk Ranking of Sites:**			
CERCLA:	9	**High:**	3	**Not Evaluated:**	0
RCRA Corrective Action:	0	**Medium:**	0	**Response Complete:**	2
RCRA UST:	2	**Low:**	6	**Total Sites:**	11
Total Sites:	11				

BRAC III

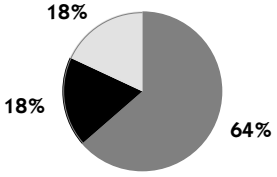
EXECUTIVE SUMMARY

Trenton Naval Air Warfare Center (NAWC) is located 30 miles northeast of Philadelphia, Pennsylvania. The Delaware River is two miles to the south. Operations that contributed to contamination at NAWC were research, development, and testing of engine systems and components, vehicle maintenance, painting, pipe fitting, welding, pest control, fire fighter training, and material storage and handling. The primary sites of concern are contaminated groundwater, spill sites, disposal areas, and Underground Storage Tanks (USTs). Primary contaminants are fuels and solvents. The organic solvent TCE was used extensively throughout the facility as a coolant for testing jet engines and other aircraft equipment.

Trenton NAWC is situated in the Piedmont Lowlands consisting of undulating ridges and nearly level to gentle slopes. There are very few natural lakes and no marshy areas in the Piedmont Lowlands. Three streams flow through the area and drain into the Delaware River. However, only one, Gold Run, receives runoff from NAWC. Surface water runoff has the potential to transport contaminants to the Delaware River which is used as a drinking water source. The groundwater aquifers underlying NAWC are also used for drinking water. The base is surrounded by industrial, commercial, agricultural and residential property.

The major area of concern to the local community is the groundwater which is contaminated with the organic solvent TCE. A pump and treat system is in operation to contain contaminated groundwater posing a potential risk to off-site residential wells. The United States Geological Survey (USGS) performed borehole geophysics and worked with the Navy performing aquifer tests to enable the Navy to accurately place future monitoring wells for delineation of the plume. In June 1996, the design and construction of a modified treatment plant will begin. New monitoring well installations are also planned for June 1996.

- A Technical Review Committee (TRC) was formed in FY91 and was converted to a Restoration Advisory Board (RAB) in FY93. The RAB consists of 12 members from the Navy, EPA, state, and community. Meetings are held quarterly. An Information Repository was established in August 1991 at the Ewing Township Library.



Current Status Of Sites

Studies Underway	7
Cleanups Underway	2
Response Complete	2
TOTALS	11

There are nine CERCLA sites and two UST sites identified at NAWC. At the end of FY95, seven sites were in the Study Phase and two were in the Cleanup Phase. The two UST sites have Response Complete (RC). At the end of FY98, all sites will have completed Remedial Investigation/ Feasibility Study (RI/FS) studies. A draft No Further Action (NFA) decision document has been submitted to regulators for six of nine CERCLA sites.

Several removal actions have been conducted at NAWC. A tank at UST 2 and surrounding contaminated soil were removed in FY92. At UST 1, a tank and contaminated soil were removed in FY93. A removal action was conducted in FY94 and FY95 to remove contaminated sludge at Site 3. No further work is expected at Site 3 after the remediation decision document is completed in FY96

The final design to remediate and contain groundwater contamination is scheduled for completion in FY97. The addition of an iron filing treatment system to address high levels of the organic solvent TCE in groundwater is being investigated. This method provides a low cost and low maintenance system to treat high levels of the organic solvent TCE in groundwater.

In FY93, the Base Realignment and Closure (BRAC) Commission recommended Trenton NAWC for closure. Operational closure is scheduled for September 1998. After closure, operations will be relocated to the Arnold Engineering Development Center in Tullahoma, Tennessee, and the NAS in Patuxent River, Maryland.

Community outreach efforts were expanded with the formation of the BRAC Cleanup Team (BCT) in FY94. The BCT prepared a BRAC Cleanup Plan (BCP) and developed a partnering agreement that established goals for meaningful community involvement in the cleanup process and to keep cleanup on the fast track. As part of the partnering effort, reuse committee members provided input on the Environmental Baseline Survey (EBS). To accelerate community reuse of installation property, one building has been leased to a local company on an interim basis. The installation has been divided into six property parcels, and the EBS for the parcels was completed. One ten acre area has been identified as Community Environmental Response Facilitation Act (CERFA) clean. No acreage has been transferred to date. The reuse committee is working towards a March 1996 completion of the Reuse Plan.

TRENTON NAWC
RELEVANT ISSUES

ENVIRONMENTAL RISK

HYDROGEOLOGY - Trenton NAWC lies within the Gold Run Drainage Basin. Storm water runoff from the base empties into Gold Run Creek, a tributary of the Delaware River. No streams, creeks, or lakes are located on NAWC property. Four aquifers in Mercer County serve as sources of groundwater. The Stockton and Lockatong Formations are the two most important, and both of these aquifers underlie NAWC. The Stockton Formation is an excellent source of groundwater and contains two aquifer systems, water table and artesian. The Lockatong has less capacity to store and transmit water. NAWC pumps industrial and drinking water from the Delaware River. The three potential contaminant migration pathways at Trenton are groundwater transport in the water table aquifer, groundwater transport in the artesian aquifer, and surface water runoff to receiving streams.

NATURAL RESOURCES - NAWC is in a highly developed, urbanized area. No natural biological communities exist within the confines of the security fences. Nearby Mercer County Airport is the largest open area in the vicinity that may be a breeding ground for various animals. Areas on NAWC without buildings, roadways, or parking facilities are limited to maintained fields or lawn. Wooded or even old field habitat does not exist, and no natural aquatic habitat is found on NAWC. Wildlife occurring on the activity is limited to species that adapt well to urbanized environments. Mammals that may be found on the grounds include raccoon, opossum, Norway rat, cottontail rabbit, squirrel and mice. Birds that frequent the area include English sparrows, starlings, mourning doves, and swifts. Fish species in the Gold Run Creek include chub, dace, shiners, sunnies, bluegills, largemouth bass, smallmouth bass, walleye, carp, and pickerel. Sport fishing is popular in the Delaware River and the nearby Raritan Canal.

RISK - Under the Department of Defense (DOD) Relative Risk Ranking System, nine of the 11 sites at NAWC were evaluated. Only three sites received a high risk ranking, while six received a low risk ranking. Sites 1, 3 and 8 were ranked high due to groundwater contamination with potential human receptors. Groundwater treatment is underway at Site 1. Site 3 has had sludge removed, and Site 8 is still under study.

REGULATORY ISSUES

PARTNERING - The BRAC Cleanup Team (BCT) developed a partnering agreement that established a series of goals for meaningful community involvement in the cleanup process. As part of this partnering effort, reuse committee members provided input on the Environmental Baseline Survey (EBS).

COMMUNITY INVOLVEMENT

RESTORATION ADVISORY BOARD - A Technical Review Committee (TRC) was formed in FY91 and was converted to a Restoration Advisory Board (RAB) in FY93. The RAB consists of 12 members from the Navy, EPA, state, and community. The first RAB meeting, held in FY94, was open to the public. Meetings are held quarterly.

COMMUNITY RELATIONS PLAN - A Community Relations Plan (CRP) was completed in September 1993. NAWC has excellent community relations and has distributed fact sheets to keep the public informed.

INFORMATION REPOSITORY - An Information Repository was established in August 1991. It is located at the Ewing Township Library for public access and contains copies of the documents in the Administrative Record.

BRAC REALIGNMENT AND CLOSURE

BRAC - Trenton NAWC was recommended for closure. Operational closure is scheduled for September 1998. After closure, operations will be relocated to the Arnold Engineering Development Center in Tullahoma, Tennessee, and the NAS in Patuxent River, Maryland.

BRAC CLEANUP TEAM - Members are from the Navy, New Jersey Department of Environmental Protection, EPA Region II and the community. The BRAC Cleanup Team (BCT) developed a partnering agreement that established a series of goals for meaningful community involvement in the cleanup process. As part of this partnering effort, reuse committee members provided input on the EBS.

DOCUMENTS - A completed BRAC Cleanup Plan (BCP) was prepared by the BCT to identify opportunities for streamlining and accelerating the cleanup process and facilitating community involvement. A draft EBS has been done and Phase II of the EBS was underway in 1995 and will be completed in 1996.

Environmental Conditions of Property Classification						
1	2	3	4	5	6	7
6 acres	0 acres	0 acres	0 acres	9 acres	10 acres	14 acres

LEASE/TRANSFER - A portion of the Building 2 hangar has been leased.

REUSE - The reuse plan will be completed in FY96 along with the Environmental Impact Statement (EIS). Proposals have been made for potential reuse. Screening for Department of Defense (DOD) and Federal Agencies has been completed. Screening is underway for state and local government.

TRENTON NAWC
HISTORICAL PROGRESS

FY86

Sites 1-7 - An Initial Assessment Study (IAS), equivalent to a Preliminary Assessment (PA), identified seven potentially contaminated sites. All seven sites were recommended for further study.

FY90

Sites 8 and 9 - These sites were identified during the Site Inspection (SI).
USTs 1 and 2 - These two UST sites were identified.

FY92

UST 2 (Public Works Gas Station) - Removal of tank and surrounding contaminated soil was completed.

FY93

UST 1 - Removal of tank and surrounding contaminated soil was completed.

FY94

Site 3 - Sludge removal began.

PROGRESS DURING FISCAL YEAR 1995

FY95

Site 1 - The start-up of a fast track interim treatment plant for the organic solvent TCE groundwater contamination began. The redesign of the interim treatment plant began in September.
Site 3 - Sludge was removed.

PLANS FOR FISCAL YEARS 1996 AND 1997

FY96

Site 1 - The design and construction of the modified treatment plant for groundwater treatment should be completed. New monitoring wells are to be installed in June 1996.
Sites 2 and 4-9 - The Remedial Investigation/Feasibility Study (RI/FS) phase is expected to be completed.
Site 3 - A decision document will be written to document the removal of sludge. No Further Action (NFA) is anticipated for this site.

FY97

Site 1 - The design of the final treatment system for groundwater contamination will be completed.
Site 8 - Possible leaking lines in the barometric well will be investigated.

TRENTON NAWC
PROGRESS AND PLANS

CERCLA	FY94 and before	FY95	FY96	FY97	FY98	FY99	FY00	FY01 and after
PA	9							
SI	9							
RI/FS			8		1			
RD			1		1	1		
RA			1			1		1
IRA			1(1)		1(1)			
RC			1	6			1	1
Cumulative Response Complete			11%	78%			89%	100%
UST	**FY94 and before**	**FY95**	**FY96**	**FY97**	**FY98**	**FY99**	**FY00**	**FY01 and after**
ISC	2							
INV								
CAP	2							
DES	1							
IMP	2							
IRA	2(2)							
RC	2							
Cumulative Response Complete	100%							